Object Handler - Select-Clause

The Select-Clause consists of one of the following:

- SELECTION Workplan
- Natural Object and DDM Selection
- Natural-related Debug Environment Selection
- Natural-related Profile Selection
- Natural-related DL/I Subfile Selection
- Natural System Error Selection
- Natural Command Processor Selection
- FDT Selection

Natural DDM Selection:
For selecting Natural DDMs, the same syntax applies as described for Natural Object Selection.

SELECTION Workplan

A Workplan of the type SELECTION contains the selection of one of the following: Natural objects, Natural-related objects, Natural system error messages, Natural command processors, DDMs, FDTs or an object list, as described in the relevant section. An object list can be used for the FIND and UNLOAD commands only.
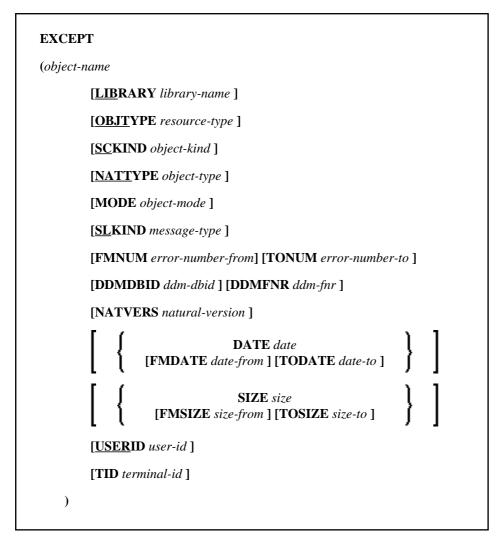
Natural Object and DDM Selection

DDMs are processed like Natural objects, except for OBJTYPE, which must be set to **D**. However, as described below, not all of the keywords available apply to DDMs.

Syntax

object-name

LIBRARY *library-name*

DBID *dbid* **FNR** *fnr* [**NAME** *vsam-name*] [**CIPHER** *cipher*]   [{ **PASSWORD** / **PSW** } *password*]

[**OBJTYPE** *resource-type*]

[**NATTYPE** *object-type*]

[**SCKIND** *object-kind*]

[**MODE** *object-mode*]

[**FMNUM** *error-number-from*]

[**TONUM** *error-number-to*]

[**SLKIND** *message-type*]

[**LANGUAGE** *languages*]

[**DDMDBID** *ddm-dbid*] [**DDMFNR** *ddm-fnr*]

[**NATVERS** *natural-version*]

[{ **DATE** *date* / [**FMDATE** *date-from*][**TODATE** *date-to*] }]

[{ [**SIZE** *size*] / [**FMSIZE** *size-from*] [**TOSIZE** *size-to*] }]

[**USERID** *user-id*]

[**TID** *terminal-id*]

[**EXCEPT**- Clause]

EXCEPT-Clause

```
    EXCEPT

    (object-name

            [LIBRARY library-name ]

            [OBJTYPE resource-type ]

            [SCKIND object-kind ]

            [NATTYPE object-type ]

            [MODE object-mode ]

            [SLKIND message-type ]

            [FMNUM error-number-from] [TONUM error-number-to ]

            [DDMDBID ddm-dbid ] [DDMFNR ddm-fnr ]

            [NATVERS natural-version ]

            [ {              DATE date              } ]
            [ { [FMDATE date-from ] [TODATE date-to ] } ]

            [ {              SIZE size              } ]
            [ { [FMSIZE size-from ] [TOSIZE size-to ] } ]

            [USERID user-id ]

            [TID terminal-id ]

    )
```

Note:
For the command FINDLIB only the following items are processed: LIBRARY, DBID, FNR, NAME, CIPHER and
PASSWORD/PSW.

Keyword Explanation - Natural Object Selection

Below is a description of the keywords and the valid values for the objects to be processed:

Keyword	Values	Default Value
object-name	A valid Natural object name or a range of names. If object-name contains blank characters, it must be enclosed in quotation marks (" "). (*) See also Name.	none
LIBRARY	A valid Natural library name or a range of names. If OBJTYPE=**D** (see below), the library name is ignored. (*) See also Name.	none
DBID	Not valid for DDMs on mainframes (OBJTYPE **D** - see below). A valid DBID.	0 (current FNAT/FUSER)

Keyword	Values	Default Value
FNR	Not valid for DDMs on mainframes (OBJTYPE **D** - see below). A valid FNR.	0 (current FNAT/FUSER)
NAME	Only applies to objects on mainframes. Not valid for DDMs on mainframes (OBJTYPE **D** - see below). A valid VSAM name.	blank (current FNAT/FUSER)
CIPHER	Only applies to objects on mainframes. Not valid for DDMs on mainframes (OBJTYPE **D** - see below). The 8-digit cipher code of the Adabas file where the objects are located.	blank (current FNAT/FUSER)
PASSWORD PSW	Only applies to objects on mainframes. An 8-character Adabas password.	blank (current FNAT/FUSER)

<u>OBJ</u>TYPE	Types of object are:
	
	    N Natural programming objects
	
	    E Natural error messages
	
	    D DDMs (objects on mainframes only)
	
	    * Asterisk (all)
	
	or any valid combination.
	
	Note:
	OBJTYPE **D** cannot be combined with any other type.
		*

<u>NATT</u>YPE	Not applicable to OBJTYPE **D** (see above). Up to 15 valid Natural object types, such as **P** for program and **V** for DDMs. Asterisk (*) = all	*

Keyword	Values	Default Value

SCKIND	Not applicable if OBJTYPE **D** (see above).
	
	Kind of Natural programming objects:
	
	S Source objects.
	       If used in the EXCEPT clause:
	       objects that exist in source form only.
	
	C Cataloged objects.
	       If used in the EXCEPT clause:
	       objects that exist in cataloged form only.
	
	A All saved and cataloged objects.
	
	W Source and cataloged objects if both have the same date and time (stowed).
	
	B Source and cataloged objects if both exist.
	
	Note:
	W (stowed) and **B** (both) are valid for the UNLOAD and FIND commands only. For LOAD and SCAN, **W** and **B** are valid entries, but they are treated like **A** (all objects).
	If data is processed in Transfer format, only **S** (source objects) and **A** applies.
		A

MODE	Not applicable if OBJTYPE **D** (see above). The type of programming mode of the Natural programming objects: **R** All objects in report mode. **S** All objects in structured mode. **A** Any.	A
FMNUM	The start number of the Natural error messages. Valid range: 1 to 9999.	1
TONUM	The end number of the Natural error messages. Valid range: 1 to 9999. The value must be greater than or equal to the value of FMNUM, if specified.	9999 or value of FMNUM
SLKIND	The type of Natural error message text: **S** Short text. Cannot be applied to the DELETE command (see Direct and PROCEDURE Workplan Commands). **L** Long text. **A** Short and long text, or the one that exists. **B** Short and long text, but only if both exist.	A

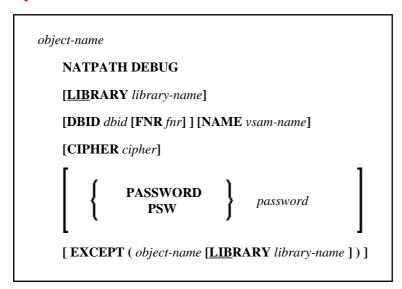| Keyword	Values	Default Value
LANGUAGE	Up to 8 valid language codes of Natural error messages. Asterisk (*) = all language codes.	*
DDMDBID	Valid DBID (1 to 65535) of the DDM. 0 = all DBIDs.	0 (no check)
DDMFNR	Valid FNR (1 to 65535) of the DDM. 0 = all FNRs.	0 (no check)
NATVERS	The Natural version of the Natural programming objects. Valid version format: *VRSM* where *V* is the 1-digit version, *R* the 1-digit release, and *SM* the 2-digit system maintenance level. Ranges are allowed: see (*) Name.	blank (no check)
DATE	The save or catalog date of the Natural programming objects. You can add a time by inserting a blank between date and time. For the format and ranges allowed, see (*) Date and (*) Time. Special terms allowed are YESTERDAY and TODAY. See (*) Special Dates.	blank (no check)
FMDATE	Start value: the date on or after which the Natural programming objects were cataloged or saved. The format is identical to DATE. See (*) Date. Special terms allowed are YEAR, MONTH, YESTERDAY and TODAY. See (*) Special Dates.	blank (no check)
TODATE	End value: the date on or before which all Natural programming objects were cataloged or saved. The format is identical to DATE. See (*) Date. Special terms allowed are YEAR, MONTH, YESTERDAY and TODAY. See (*) Special Dates.	blank (no check) or high value (if FMDATE specified)
SIZE	The size of the Natural programming objects. Maximum: 7-digit number.	0 (no check)
FMSIZE	The start value for the size of the Natural programming objects. Maximum: 7-digit number.	0 (no check)
TOSIZE	The end value for the size of the Natural programming objects. Maximum: 7-digit number.	0 (no check) or high value (if FMSIZE specified)
USERID	The ID of the user who saved or cataloged the Natural programming objects: 8-character Natural user ID or a range of IDs. See also (*) Name.	blank (no check)
TID	Not applicable if OBJTYPE=D (see above). Terminal ID of the terminal where the Natural programming objects were saved or cataloged: 8-digit Natural terminal ID as provided by the system variable *INIT-ID or a range of IDs. See also (*) Name.	blank (no check)

Keyword	Values	Default Value
EXCEPT	All objects which match the selection criteria entered before EXCEPT are checked against **all** parameters contained within the parentheses following the keyword EXCEPT. If they match all these parameters too, they are not processed.	not applicable

Note:

- Parameters that are irrelevant for OBJTYPE are ignored. For example: DATE, SIZE and USERID have no meaning for Natural error messages.
- DBID, FNR, NAME, CIPHER and PASSWORD/PSW are ignored by the LOAD and SCAN commands. These parameters must be specified in the Parameter-Setting clause as described for LOADFNAT... and LOADFUSER... in Keyword Explanation - Parameter-Setting.

Natural-related Debug Environment Selection

Syntax

object-name

    NATPATH DEBUG

    [**LIB**RARY *library-name*]

    [**DBID** *dbid* [**FNR** *fnr*]] [**NAME** *vsam-name*]

    [**CIPHER** *cipher*]

    $$\left[\left\{ \begin{array}{c} \textbf{PASSWORD} \\ \textbf{PSW} \end{array} \right\} \ \textit{password} \right]$$

    [**EXCEPT** (*object-name* [**LIB**RARY *library-name*])]

Keyword Explanation - Natural-related Debug Environment Selection

Below is a description of the keywords and the valid values for the objects to be processed:
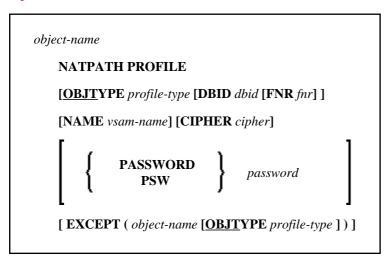
Keyword	Values	Default Value
object-name	A valid object name or a range of names. See also (*) Name.	none
LIBRARY	A valid Natural library name or a range of names. (*) See also Name.	none
DBID	A valid DBID.	0 (current FUSER)
FNR	A valid FNR.	0 (current FUSER)
NAME	A valid VSAM name.	blank (current FUSER)
CIPHER	The 8-digit cipher code of the Adabas file where the objects are located.	blank (current FUSER)
PASSWORD PSW	An 8-character Adabas password.	blank (current FUSER)
EXCEPT	See EXCEPT under Natural Object Selection.	not applicable

Note:
DBID, FNR, NAME, CIPHER and PASSWORD/PSW are ignored by the LOAD and SCAN commands. These parameters must be specified in the Parameter-Setting clause as described for LOADFNAT... and LOADFUSER... in Keyword Explanation - Parameter-Setting.

Natural-related Profile Selection

Syntax

```
object-name

    NATPATH PROFILE

    [OBJTYPE profile-type [DBID dbid [FNR fnr] ]

    [NAME vsam-name] [CIPHER cipher]

    ⎡  ⎧  PASSWORD  ⎫          ⎤
    ⎢  ⎨  PSW       ⎬  password ⎥
    ⎣  ⎩            ⎭          ⎦

    [ EXCEPT ( object-name [OBJTYPE profile-type ] ) ]
```

Keyword Explanation - Natural-related Profile Selection
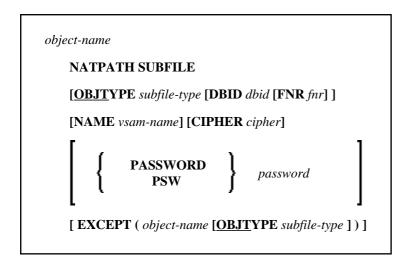
Below is a description of the keywords and the valid values for the objects to be processed:

Keyword	Values	Default Value
object-name	A valid object name or a range of names. See also (*) Name.	none
DBID	A valid DBID.	0 (current FNAT)
FNR	A valid FNR.	0 (current FNAT)
NAME	A valid VSAM name.	blank (current FNAT)
CIPHER	The 8-digit cipher code of the Adabas file where the objects are located.	blank (current FNAT)
PASSWORD PSW	An 8-character Adabas password.	blank (current FNAT)
OBJTYPE	The type of profile: **D** Device profile **E** Editor profile **M** Map profile **P** Parameter profile ***** Asterisk (all profile types) or any valid combination.	*
EXCEPT	See EXCEPT under Natural Object Selection.	not applicable

Note:
DBID, FNR, NAME, CIPHER and PASSWORD/PSW are ignored by the LOAD and SCAN commands. These parameters must be specified in the Parameter-Setting clause as described for LOADFNAT... and LOADFUSER... in Keyword Explanation - Parameter-Setting.

Natural-related DL/I Subfile Selection

Syntax

```
object-name

    NATPATH SUBFILE

    [OBJTYPE subfile-type [DBID dbid [FNR fnr] ]

    [NAME vsam-name] [CIPHER cipher]

    ┌  ┌              ┐          ┐
    │  ┤ PASSWORD     ├ password │
    │  └ PSW          ┘          │
    └                            ┘

    [ EXCEPT ( object-name [OBJTYPE subfile-type ] ) ]
```

Keyword Explanation - Natural-related DL/I Selection

Below is a description of the keywords and the valid values for the objects to be processed:

Keyword	Values	Default Value
object-name	A valid object name or a range of names. See also (*) Name.	none
DBID	A valid DBID.	0 (current FDIC)
FNR	A valid FNR.	0 (current FDIC)
NAME	A valid VSAM name.	blank (current FDIC)
CIPHER	The 8-digit cipher code of the Adabas file where the objects are located.	blank (current FDIC)
PASSWORD PSW	An 8-character Adabas password.	blank (current FDIC)
OBJTYPE	The type of DL/I subfile: D NDB P NSB * Asterisk (all subfile types)	*
EXCEPT	See EXCEPT under Natural Object Selection.	not applicable

Note:

DBID, FNR, NAME, CIPHER and PASSWORD/PSW are ignored by the LOAD and SCAN commands. These parameters must be specified in the Parameter-Setting clause as described for LOADFNAT... and LOADFUSER... in Keyword Explanation - Parameter-Setting.

Natural System Error Selection

This selection is used to select Natural system error messages.

Syntax

```
ERROR NATERROR

    [
        DBID dbid FNR fnr [NAME vsam-name ] [CIPHER cipher ]     [ {  PASSWORD  }  password  ]  ]
                                                                   {  PSW       }

        [FMNUM error-number-from ] [TONUM error-number-to ]

        [SLKIND message-type ]

        [LANGUAGE languages ]

        EXCEPT (

            [FMNUM error-number-from ] [TONUM
            error-number-to ]

            [SLKIND message-type ]

            [LANGUAGE languages]

            )
    ]
```

Keyword Explanation - Natural System Error Selection

Below is a description of the keywords and the valid values for the system error messages to be processed:

Keyword	Values	Default Value
DBID	Only applies to objects on mainframes. A valid DBID.	0 (current FNAT)
FNR	Only applies to objects on mainframes. A valid FNR.	0 (current FNAT)
NAME	Only applies to objects on mainframes. A valid VSAM name.	blank (current FNAT)
CIPHER	Only applies to objects on mainframes. The 8-digit cipher code of the Adabas file where the Natural error messages are located.	blank (current FNAT)
PASSWORD PSW	Only applies to objects on mainframes. An 8-character Adabas password.	blank (current FNAT)
FMNUM	The start number of the Natural error messages. Valid range: 1 to 9999.	1
TONUM	The end number of the Natural error messages. Valid range: 1 to 9999. The value must be greater than or equal to the value of FMNUM if specified.	9999 or value of FMNUM (if specified)
SLKIND	See SLKIND under Natural Object Selection. A = short and/or long Natural error message texts.	A
LANGUAGE	Up to 8 valid language codes of Natural error messages. Asterisk (*) = all language codes.	*
EXCEPT	See EXCEPT under Natural Object Selection.	

Note:
DBID, FNR, NAME, CIPHER and PASSWORD/PSW are ignored by the LOAD and SCAN commands. These parameters must be specified in the Parameter-Setting clause as described for LOADFNAT... in Keyword Explanation - Parameter-Setting.

Natural Command Processor Selection

This selection is used to select Natural command processors.

Syntax

```
object-name PROCESSOR ncp-library-name

 ┌                                                                                    ┐
 │          ncp-dbid FNR ncp-fnr                    ┌  ┌ PASSWORD ┐              ┐    │
 │   DBID   [NAME ncp-vsam-name ] [CIPHER ncp-cipher ]  │   PSW    │ ncp-password │    │
 │                                                   └  └          ┘              ┘    │
 │                                                                                    │
 ┌                                                                                    ┐
 │   EXCEPT   (                                                                       │
 │                                                                                    │
 │            object-name                                                             │
 │                                                                                    │
 │            [LIBRARY ncp-library-name]                                              │
 │                                                                                    │
 │            )                                                                       │
 └                                                                                    ┘
```

Note:
For the command FINDLIB only the following items are processed:
PROCESSOR, DBID, FNR, NAME, CIPHER and {PASSWORD/PSW}.

Keyword Explanation - Natural Command Processor Selection

Below is a description of the keywords and the valid values for the command processors to be processed:

Keyword	Values	Default Value
object-name	The name of a valid Natural command processor or a range of names. See also (*) Name.	none
PROCESSOR	A valid Natural library name or a range of names. See also (*) Name.	none
DBID	A valid DBID of the Adabas file where the command processors are located.	0 (current FNAT/FUSER)
FNR	A valid FNR of the Adabas file where the command processors are located.	0 (current FNAT/FUSER)
NAME	Only applies to objects on mainframes. A valid VSAM name.	blank
CIPHER	The 8-digit cipher code of the Adabas file where the command processors are located.	blank
PASSWORD PSW	The 8-character Adabas password of the Adabas file where the command processors are located.	blank
EXCEPT	See EXCEPT under Natural Object Specification.	

Note:
DBID, FNR, NAME, CIPHER and PASSWORD/PSW are ignored by the LOAD and SCAN commands. These
parameters must be specified in the Parameter-Setting clause as described for LOADNCP... in Keyword Explanation
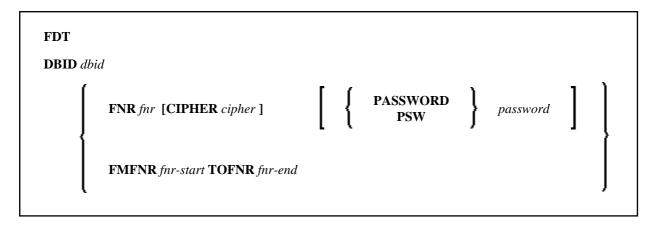- Parameter-Setting.

FDT Selection

This selection is used to select Adabas FDTs.

For loading FDTs, see also FDTs in the section Object Specification.

Below is the syntax that applies when processing FDTs:

Syntax

```
   FDT

   DBID dbid

   ⎧                                    ⎡ ⎧ PASSWORD ⎫           ⎤ ⎫
   ⎪   FNR fnr  [CIPHER cipher ]        ⎢ ⎨          ⎬ password  ⎥ ⎪
   ⎨                                    ⎣ ⎩ PSW      ⎭           ⎦ ⎪
   ⎪                                                               ⎬
   ⎪                                                               ⎪
   ⎪   FMFNR fnr-start TOFNR fnr-end                               ⎪
   ⎩                                                               ⎭
```

Keyword Explanation - FDT Selection

Below is a description of the keywords and the valid values for the FDTs to be processed:

Keyword	Values	Default Value
DBID	DBID of the FDT.	none
FNR	FNR of the FDT.	none
CIPHER	The 8-digit cipher code of the FDT.	none
PASSWORD PSW	The 8-character Adabas password of the FDT.	none
FMFNR	Applies to the FIND and UNLOAD commands only. The start FNR for the FDT to be processed.	none
TOFNR	Applies to the FIND and UNLOAD commands only. The end FNR for the FDT to be processed.	none